

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  E-2525/04	<b>FOR FURTHER ACTION</b>  see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No.  PCT/EP2004/053217	International filing date (day/month/year)  01/12/2004	(Earliest) Priority Date (day/month/year)  05/12/2003
Applicant  ANSALDO SEGNALAMENTO FERROVIARIO S.P.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**RAILWAY BEACON AND RELATED PRODUCTION METHOD**

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/053217

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B61L3/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06K G07C G01S B61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 163 324 A (* ELECTROMATIC) 19 February 1986 (1986-02-19) abstract	1-12
A	WO 00/43952 A (INTERMEC IP CORP) 27 July 2000 (2000-07-27) figure 4	1-12
A	EP 0 996 085 A (A. & J. STOECKLI AG) 26 April 2000 (2000-04-26) abstract; figures 4,5	1-12
	-/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

16 February 2005

Date of mailing of the international search report

23/02/2005

Name and mailing address of the ISA

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Authorized officer

Janhsen, A

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/053217

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	REINDL L ET AL: "Hybrid SAW-device for a European train control system" ULTRASONICS SYMPOSIUM, 1994. PROCEEDINGS., 1994 IEEE CANNES, FRANCE 1-4 NOV. 1994, NEW YORK, NY, USA, IEEE, US, vol. 1, 1 November 1994 (1994-11-01), pages 175-179, XP010139561 ISBN: 0-7803-2012-3 the whole document	1-12
A	US 2003/076662 A1 (MIEHLING MARTIN) 24 April 2003 (2003-04-24) abstract; figure 1a	1-12
P,A	EP 1 467 315 A (EASTMAN KODAK COMPANY) 13 October 2004 (2004-10-13) abstract; figures 13-16	1-12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/053217

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2163324	A	19-02-1986	AU 4619785 A	20-02-1986
			GB 2208058 A , B	15-02-1989
			ZA 8506178 A	30-04-1986
WO 0043952	A	27-07-2000	WO 0043952 A1	27-07-2000
EP 0996085	A	26-04-2000	EP 0996085 A1	26-04-2000
US 2003076662	A1	24-04-2003	EP 1052594 A1	15-11-2000
			EP 1052595 A1	15-11-2000
			AT 205951 T	15-10-2001
			AU 3022600 A	16-11-2000
			DE 59900275 D1	25-10-2001
			ES 2162714 T3	01-01-2002
			JP 2001024550 A	26-01-2001
			US 6687131 B1	03-02-2004
EP 1467315	A	13-10-2004	US 2004203185 A1	14-10-2004
			EP 1467315 A2	13-10-2004
			JP 2004318846 A	11-11-2004

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2004/053217

International filing date (day/month/year)  
01.12.2004

Priority date (day/month/year)  
05.12.2003

International Patent Classification (IPC) or both national classification and IPC  
B61L3/12

Applicant  
ANSALDO SEGNALAMENTO FERROVIARIO S.P.A.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

10/581383  
IAP9 Rec'd PCT/PTO 02 JUN 2006  
International application No.  
PCT/EP2004/053217

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2004/053217

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**Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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**Box No. VI Certain documents cited**

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**1. Certain published documents (Rules 43bis.1 and 70.10)**

and / or

**2. Non-written disclosures (Rules 43bis.1 and 70.9)**

**see form 210**

**With respect to item V**

1. Reference is made to the following document, cited in the search report:

D1: GB2 163 324 A1, 19 February 1986

- 2.1 D1 discloses a railway beacon according to the preamble of claims 1 and 8 (see column 1, lines 5-27 and figure 3).
- 2.2 The subject-matter of independent claims 1 and 8 differs from the railway beacon of D1 merely in that the circuitry and antennae are placed in seats of the substrate and are covered by a resin.
- 2.3 The subject-matter of claims 1 and 8 solves the technical problem of improving the rigidity and the manufacturing process of such beacons.
- 2.4 The solution, as given by the subject-matter of claims 1 and 8, is neither disclosed nor suggested by the available prior art. The remaining A-documents cited in the search report merely disclose the background technology. The subject-matter of claims 1 and 8 therefore meets the requirements of Art. 33 (2)-(4) PCT.
- 2.5 Claims 2-7 and 9-12 are dependent claims. Consequently, the subject-matter of said claims also meets the requirements of Art. 33 (2)-(4) PCT.